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DESCRIPTIONS AND RECORDS OF HARVEST MICE (GENUS REITHRODONTOMYS) FROM MEXICO.

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Harvest mice collected in northern Mexico in the past three years include *Reithrodontomys montanus* Baird, formerly not known to occur in Mexico, and two undescribed forms, one a species belonging to the subgenus *Reithrodontomys*, the other a race of *Reithrodontomys fulvescens* Allen.

Reithrodontomys burti, new species.

Type.—Adult male, skin and skull, no. 83001 Mus. Vert. Zool., collected at Rancho de Costa Rica, Rio Sonora, Sonora, Mexico, on May 3, 1938, by Margarito Delgadillo. Original number 5400 Seth B. Benson.

Distribution.—Coastal flood plains of western Sonora from the Rio Sonora south to near Guaymas.

Diagnosis.—A member of the subgenus *Reithrodontomys* (as defined by Howell, U. S. Dept. Agr., Bur. Biol. Surv., N. A. Fauna No. 36, 1914) characterized by small size, short tail, relatively short hind feet, large ears, pale color, yellowish cheeks, distinct light-colored area surrounding ear, conspicuous pale tuft at anterior base of ear, nearly pigmentless tail, angular skull, abruptly spreading zygomata, large infraorbital foramina, long (7.3 mm.) nearly straight baculum.

Comparisons.—Distinguished from all species of *Reithrodontomys* save *R. montanus* Baird, *R. megalotis* Baird, and *R. humulis* Bachman, in having, on the average, a tail less than 65 mm. in length and shorter than length of head and body.

Compared with *R. montanus* (as defined by Benson, Journ. Mammalogy, vol. 16, 1935, pp. 139–142): Similar in size and proportions except for ears which are much larger. Color paler, of yellowish cast rather than grayish. Cheeks paler and more strongly contrasted with color on top of head. Tail with less pigment, lacking the sharply distinct dark dorsal stripe present in *montanus*. Skull larger, nasals relatively longer, zygomata more angular and spreading more widely anteriorly, infraorbital foramina distinctly

larger, especially on dorsal surface of skull. Baculum longer, nearly straight rather than distinctly curved, more nearly cylindrical at base.

Compared with *R. megolatis:* Slightly smaller in body size and in weight, tail actually and relatively shorter (averaging only 80% of length of head and body rather than more than 100% as in *megalotis*), hind feet actually and relatively shorter, ears actually and relatively larger. Color paler, ear tufts more conspicuous and paler, tail without a distinct dorsal stripe (a distinct stripe present in *megalotis*). Skull more angular, braincase smaller, rostrum broader, zygomatic arches more robust anteriorly and more nearly parallel. Baculum about same in length, but nearly straight rather than distinctly curved, and more nearly cylindrical at base.

Compared with *R. humulis:* Much paler in color (yellowish gray rather than dark brown, hairs on breast white rather than pigmented), ears much larger (averaging 16.4 mm. from notch rather than 10 mm. or less), skull flatter and wider, zygomatic arches more nearly parallel, infraorbital foramina larger.

Color (Capitalized color terms after Ridgway, Color Standards and Color Nomenclature, 1912).—Dorsal hairs with tips black, subterminal bands Light Ochraceous-Buff to Pale Ochraceous-Buff (darkest distally), bases Dark Plumbeous. Pigmentation of subterminal bands more intense toward sides, where a lateral stripe is evident, and on the rump. Plumbeous pigment much reduced on sides of face and about base of ear allowing yellowish tone to dominate. Subterminal bands short and faintly pigmented on top of head and neck where plumbeous tone of hair bases dominates the general color effect. Skin and hairs of inner surface of pinna dark-pigmented. Feet white. Tail scantily clothed with short hairs, most of which lack pigment. A faint dorsal stripe on the tail in some specimens results mainly from pigment in the skin. Several specimens have no pigment in any of the hairs on the tail.

There is some variation in the intensity of the yellowish pigmentation which is Pinkish-Cinnamon on the most richly colored specimen.

Measurements.—Average, minimum, and maximum measurements in millimeters of 18 adult and subadult males: Total length, 129 (124–132); length of tail vertebrae, 59 (53–66); length of hind foot, 16.4 (16–17); height of ear from notch, 15.5 (14–17); weight in grams, 10.6 (9.7–12.4); length of head and body, 69 (65–72); greatest length of skull, 20.3 (19.7–21.2); breadth of braincase, 9.6 (9.3–10.1); width of outer wall of anteorbital [=infraorbital] foramen, 2.1 (1.9–2.2); length of baculum (10 specimens), 7.3 (6.0–8.3).

Specimens examined.—Total number 37, all from Sonora, Mexico, as follows: 11.3 mi. W. Hermosillo, 3; Rancho de Costa Rica, Rio Sonora, 34.

Remarks.—Among all the species of harvest mice, *R. montanus* bears the closest resemblance to *R. burti.* The relationship between the two is not close, however, as indicated by the trenchant differences between them, particularly in the baculum. There is no evidence of intergradation between the species although *R. montanus* is now known to occur in northeastern Sonora only about 200 miles to the northeast of the range of *burti. R. megalotis* probably is less closely related to *burti* than is *montanus*, and

likewise shows no sign of intergradation with *burti*. Burt, however, (Univ. Mich. Mus. Zool., Misc. Publ. No. 35, 1938, p. 52) recorded from San José de Guaymas, under the name *R. m. megalotis*, a specimen which he regarded as probably representing an unnamed race of *R. megalotis*. The characters listed for this specimen are those present in *burti* and I therefore assume that it belongs to this species. I have named this harvest mouse for Dr. Burt in recognition of his work on the mammals of Sonora.

Comparisons with *humulis* were made only because that species likewise is small and short-tailed. On geographic, ecological, and structural grounds *humulis* is much less closely related to *burti* than are *montanus* and *megalotis*.

In the shape of the baculum (see figure) *burti* is strikingly distinct from *montanus*, *megalotis*, and *fulvescens*, in which this bone is distinctly curved and tends to be broader and more flattened at the base. So distinctive is this character that by it alone *burti* can be distinguished from the other harvest mice occurring in Sonora.

At Rancho de Costa Rica, *burti* was abundant in a field of wheat stubble where two years previously none was caught in spite of intensive trapping. The specimens from 11.3 miles west of Hermosillo were caught on a flat plain of reddish silt which bore a thin stand of dry grass, and scattered trees of mesquite, palo verde, and palo fierro. This is probably the original habitat of the species.

Reithrodontomys fulvescens canus, new subspecies.

Type.—Adult male, skin and skull, no. 76664 Mus. Vert. Zool., collected five miles southeast of Chihuahua, Chihuahua, Mexico, on May 20, 1937, by Margarito Delgadillo. Original number 4446 Seth B. Benson.

Distribution.—High desert plains of Chihuahua and Durango.

Diagnosis and comparisons.—The palest race of *Reithrodonotomys fulvescens* known, characterized chiefly by grayish color of head and shoulders. Compared with *R. f. fulvescens:* Averages slightly larger; skull with braincase more inflated and rostrum longer; pigmentation less intense, especially on head and shoulders where the prevailing color is Pale Ochraceous-Buff rather than Light Ochraceous-Buff.

Color.—Dorsal hairs with tips colorless or black, subterminal band Light Ochraceous-Buff to Pale Ochraceous-Buff (darkest distally), bases Slate Color. Subterminal band palest on head and shoulders, darkest on rump and toward sides. A lateral stripe of between Light Ochraceous-Buff and Ochraceous-Buff is present. Hairs of ventral surface with tips white, bases Slate Color.

In *canus* the color of the subterminal band is not only less intense than in *fulvescens*, but is less even in distribution with a much greater difference in intensity of color between the distal and proximal portions of the subterminal band.

Measurements.—Average, minimum, and maximum measurements in millimeters of 7 adult and subadult males: Total length, 172 (158–187); length of tail vertebrae, 97 (87–109); length of hind foot, 20 (19–22); ear from notch, 15 (14–16); weight in grams, 12.9 (12.0–13.3); greatest length

of skull, 22.1 (21.0–23.0); breadth of braincase, 10.4 (10.1–10.8); length of nasals, 8.6 (8.0–9.1); width of outer wall of anteorbital [=infraorbital] foramen, 2.0 (1.8–2.2).

Specimens examined.—Total number 14, from localities in Mexico as follows: *CHIHUAHUA:* Cañon del Potrero, 7 miles west El Sauz, 2; Cañon Gotera, 9 miles northwest of Chihuahua, 2; 5 miles southeast of Chihuahua, 2; Pozo Mangiay, 30 miles south of Chihuahua, 1; San Lucas, Rio San Pedro, 2. *DURANGO:* 14 miles east of Zarca, 5.

Reithrodontomys montanus griseus Bailey.

The first specimen of *R. montanus* from Mexico was collected by Margarito Delgadillo and myself on May 30, 1936, among sacatón about 21 miles south of Agua Prieta, Sonora, in close proximity to Kilometer 30 on the railroad between Agua Prieta and Nacozari. The second I collected on June 9, 1937, on a short-grass plain five kilometers southwest of Canutillo, north-central Durango. These two locality records constitute a great extension of the known range of *Reithrodontomys montanus* to the west and south, as Socorro, New Mexico, was previously the westernmost locality, and San Antonio, Texas, the most southern. Probably the species will be found to occur throughout the plains of the Mexican plateau.

The specimens are nearly identical in color and size, but the skull of no. 76658, from Durango, is larger and the braincase relatively more inflated than in no. 75697, from Sonora. Each agrees in most characters with specimens of *R. m. griseus*, to which I refer them pending fuller knowledge of geographic variation in *R. montanus*.

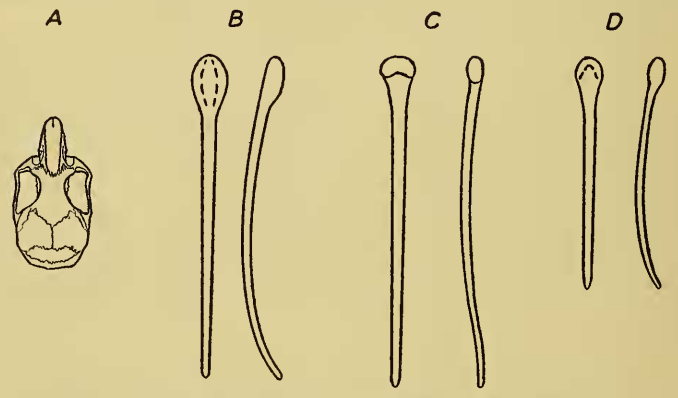

Figure 1. A. Skull of type of *R. burti*, dorsal view, x i.

B–D. Bacula of species of harvest mice, ventral and lateral views, x6. B. *R. megalotis megalotis* (no. 82972). C. *R. burti* (type). D. *R. montanus* (no. 75897).